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# ON A QUINARY NOTATION AMONG THE ILONGOTS OF NORTHERN LUZON

By OTTO SCHEERER — (Instructor in German, University of the Philippines, Manila, P. I.).

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# ON A QUINARY NOTATION AMONG THE ILONGOTS OF NORTHERN LUZON.

#### By Otto Scheerer.

Within the area of Austronesian languages there are represented, in a pure or in a modified form, all those systems of numeration which are designated as quinary, decimal, or vigesimal notations, according as they are based upon the counting of the digits of only one hand, of both hands, or of both hands and feet.

From the Philippines in particular none but decimal systems have hitherto been recorded, not excepting such tribes as the Negritos, Tagbanwas and similar people of low culture.<sup>1</sup>

In view of this general use of decimal series of numerals in the Philippines it will be of interest here to make known a case of quinary notation in northern Luzon as found by me some time ago in an old Egongot (i. e., Ilongot) catechism dating from 1792, and declared by its authors, three Spanish missionaries, to be a revision of a still older text.<sup>2</sup> As is to be supposed, the catechism does not give the Egongot numerals by way of demonstration. They occur in the text-mostly in the form of ordinals in such places as "The ten commandments," "The articles of faith," and the like. Collecting these ordinals I obtain the following list:

	Ta onbucoug	the	first .	Ta	catambiang no siyet	the sixth	· •
under .	Ta cadua	$\mathbf{the}$	second	Ta	catambiang no dua	the seventh	
р. ;	Ta catgo	$^{}$ the	third 🚽 🔒	Ta	catambiang notĝo	the eighth	
÷.	Ta caapat	the	fourth	Ta	catambiang no apat	the ninth	
1.27	Ta catambiang	$_{\mathrm{the}}$	fifth	Ta	catampopoo	the tenth	
					· · · ·		

<sup>14</sup>For a full treatise\_on the numerals of these systems see the praiseworthy paper of Professor Frank R. Blake in *Journ. Am. Or. Soc.* (1907), 28: Contributions to Comparative Philippine Grammar, Part II.

<sup>2</sup> "Catecismo de doctrina cristiana en Egongot, escrito por el M. R. P. Fray Francisco de la Zarza, O. S. F. Dado á luz por Fernando Blumentritt, . . . y aumentado por & mismo editor con equivalencias del texto egongot ó ilongote en castellano, tagalog y moro de Maguindanao." (Vienna, 1893). As will be shown, the form "Egongot" for "Ilongot" represents an idiomatic pronunciation of this word among at least that section of the Ilongots whose dialect is used in this catechism. For this reason it is employed by me in this paper as a term distinctive for that dialect.

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Ta, appearing before each of these numerals, is an Egongot demonstrative particle acting as article.

Onbucoug is the equivalent, not of "one," but of "first." The word occurs, in this or related forms, in several other passages. There is evidently a typographical confusion between "u" and "n." Compare—

Na mucong toi Dios Ama, ta Dios Anac, at tā Spiritu Santo? Is first (superior) the God Father to God Son and to Ghost Holy?

Auan-a namucoug, auan-a naonod de, ten sisiet ta enca Dios de. There is not being first, there is not following behind among them, for only one the Godship their.<sup>3</sup>

Ca in cadua, catgo, etc., is a prefix making ordinals from cardinals, not only in Egongot but in several other dialects of Luzon.

material for establishing the following list of Egongot cardinals:										
Eng- lish.	Egongot.	Pangasinan.	Eng- lish.	Egongot.	Pangasinan.					
one two. three four five	siyet (siet) dua tego apat tambiang	isa dua talo apat lima	six seven eight nine ten	tambiang no siyet tambiang no dua tambiang notgo tambiang no apat tampo (tampoo)	anem pito ualo siam sampolo (samplo)					

Eliminating these three factors from the above list, and observing the composition of the numerals from "six" to "ten," we have all the necessary material for establishing the following list of Egongot cardinals:

The cardinals tego, tambiang, and tampo (tampoo) occur as such repeatedly in the text; siet was quoted above in its restrictive form sisiet. For (comparison with a series of typical Philippine numerals the corresponding Pangasinan cardinals have been added.

"One" is expressed in Egongot by a word, siet or siyet, which, compared with Pangasinan as well as with any other Philippine dialect, shows hardly any affinity, at least not *prima facie*.

From "two" to "four" Egongot uses numerals which, though varying in form, are the common property of all these dialects. The characteristic variation in the case of the numeral "three" in Egongot is the change from general Philippine l or d to g. The same change, typical for Egongot, is seen in such other words as gema, "hand" (Tagalog lima), gake, "male" (Tag. lalaki), uge, "again," "anew" (Tag. ulî), etc. It is this sound-change which accounts also for the form "Egongot" instead of "Ilongot," the change from i to e being the ordinary fluctuation of these vowels.

"Five" is expressed, not by *lima*, in which all Philippine dialects agree, and which, as we have just seen, would be here *gema*, but by the idiomatic term *tambiang*, formed of a prefix *tam* (cf. *tampo*) before a stem, *biang*.

\* Op. cit., p. 19.

#### - QUINARY NOTATION AMONG THE ILONGOTS.

From "six" to "nine" the Egongot numerals are clearly seen to express "five and one," "five and two," "five and three," and "five and four," which shows that, once "five" is reached by counting the fingers of onehand, the count is begun anew. That the particle no is the equivalent of "and," is proved by a phrase of the text: dit bucolot no mauguin bininiaguen, "the pagans and bad Christians." 4

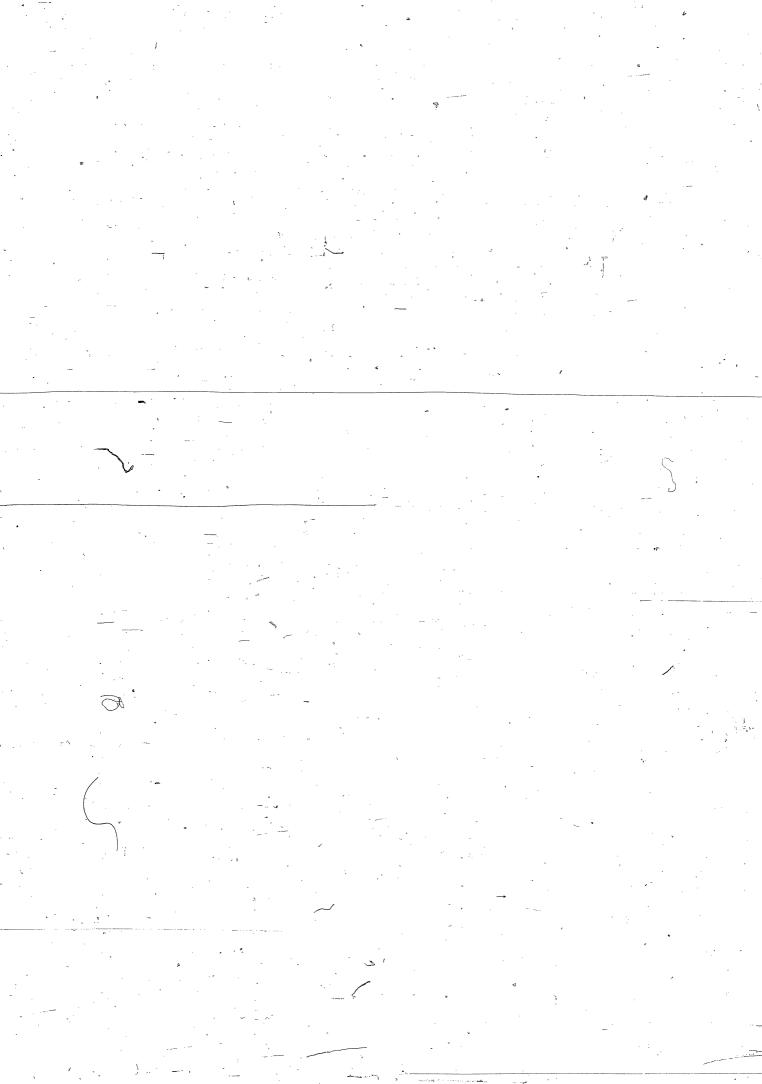
The numeral for "ten" is tampo, evidently with long o (compare the variant tampoo). It consists of the prefix tang which also appears in tambiang, changed to tam- by the influence of the labial that follows, and stem po or poo, which is the common Philippine polo or pulo with elision of l.

For the two numerals "one" and "five," in Egongot we find no immediate correspondent among the forms of the equivalent numerals in the generality of the other dialects. But apart from these two words we have as characteristic of this series of Egongot numerals that it is based on a clearly quinary plan, and that the words used are for the greater part the common property of a family of languages which, as far as it is represented in the Philippines, uses none but decimal systems. Similar cases of quinary series we find in Formosa.<sup>5</sup>

It remains to be pointed out that, although the Egongot plan is quinary, as far as I have been able to illustrate it above, it is only imperfectly so. If it were purely quinary the numeral for "ten," instead of being expressed by a distinct word, would be given by such a term as "five-five" or "two-fives." Again, beyond "ten," the advance would be by fives, not by tens. But this is a question not to be decided from the text before me, which lacks examples of higher numerals. I may, however, add that there exists a variant of the Egongot speech here illustrated, the speakers of which use a purely decimal series from "one" to "ten," and it may be believed that this will ultimately supersede the quinary series. For the present it must suffice that evidence has been given here of the existence in the Philippines of a representative of the quinary notation which is generally assumed to be a more primitive form of counting than the decimal system.

\* Op. cit., p. 27.

<sup>5</sup> Cf. the numerals given under 'Pep. Paz.' and 'Shek. T.' in Table I of The Batan Dialect as a Member of the Philippine Group of Languages. Division of Ethnology Publications, Manila (1908), 5, pt. I.



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